

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

1-43. (canceled).

44. (previously presented) A polyolefin-containing fiber carrying at its surface a hydrophobic finish comprising 0.01-1.0% by weight of the fiber of at least one water-insoluble ester of a mono-, di, tri- or tetrahydric alcohol with a molecular weight not exceeding 500 and a branched or straight chain fatty acid with between 12 and 30 carbon atoms where the water-insoluble ester is present at 35-65% by weight of the finish and said finish further comprising 35-65% of a mineral oil and 0.5-3% of an ethoxylated alcohol.

45. (canceled)

46. (previously presented) A method for producing a nonwoven material, the method comprising providing a web of fibres according to claim 44 and bonding the web to produce the nonwoven material.

47. (canceled)

48. (previously presented) A nonwoven material comprising fibres according to claim 44.

49. (canceled)

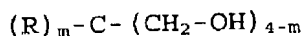
50. (previously presented) A composite material comprising a nonwoven material according to claim 48, wherein said nonwoven material is:

- a. laminated to a film layer or otherwise provided with a film coating; or
- b. bonded to or otherwise provided with a spunbonded layer or a layer of meltblown fibres.

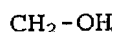
51. (previously presented) A fiber according to claim 44, wherein the fiber is a cardable staple fiber.

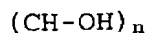
52. (previously presented) A polyolefin-containing fiber according to claim 44, consisting essentially of polypropylene, polyethylene or a copolymer thereof.

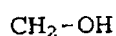
53. (previously presented) A fibre according to claim 44, wherein the water-insoluble ester is the reaction product of a polyol having the formula:



or



$$|$$


$$|$$


in which R is an alkyl group having 1 to 4 carbon atoms; m is 0 to 3 and n is 0 to 4;

with a branched or straight chain fatty acid having between 12 and 30 carbon atoms.

54. (previously presented) A fibre according to claim 53 wherein the polyol is selected from the group consisting of ethylene glycol, propylene glycol, glycerol, neopentyl glycol, trimethylolethane and trimethylolpropane.

55. (previously presented) A fiber according to claim 53, wherein the at least one of said ester is the reaction product of glycerol with at least one saturated or unsaturated fatty acid residue having 12-24 carbon atoms.

56. (previously presented) A fiber according to claim 44, wherein the at least one of said ester is a monoester and the reaction product of a fatty acid having 14-18 carbon atoms with a branched chain alcohol.

57. (previously presented) A fiber according to claim 44 carrying at its surface

at least one water-insoluble ester comprising the reaction product of glycerol with at least one saturated or unsaturated fatty acid residue having 12-24 carbon atoms; and

at least one water-insoluble ester the reaction product of neopentyl glycol with at least fatty acid residue having 12-24 carbon atoms.

58. (previously presented) A fiber according to claim 44, further comprising an antistatic agent.

59. (previously presented) A fiber according to claim 58, wherein the antistatic agent is anionic or nonionic.

60. (previously presented) A fiber according to claim 58, wherein the antistatic agent has the formula $R^1R^2O_3PO^-M^+$, where R^1 and R^2 are independently selected from the group consisting of

C₂-C₃₀ alkyl and polyether, and M⁺ is an alkali metal ion, an ammonium ion or a proton.

61. (previously presented) A fiber according to claim 58, wherein the antistatic agent has the formula R¹R²R³O₃PO, where R¹, R² and R³ are independently selected from the group consisting of methyl, C₂-C₃₀ alkyl and polyether.

62. (previously presented) A fiber according to claim 44 further comprising a friction reducing additive comprising a wax or wax mixture and/or a polydiorganosiloxane.

63. (previously presented) A fiber according to claim 44, further comprising a mineral oil and an ethoxylated alcohol.

64. (previously presented) A fiber according to claim 44, having a hydrophobicity, as measured by the WRC test, corresponding to 10.21 to 27.74 cm for cut fibers 1 meter in length.

65. (previously presented) A non-woven material according to claim 48, having a hydrophobicity, as measured by the WRC test, corresponding to about 9 cm to about 10.5 cm at a basis weight of the non-woven material of 23 g/cm².

66. (withdrawn-currently amended) A polyolefin-containing fiber with a hydrophobic finish comprising 0.01-1.0% by weight of the fiber produced by a method comprising the following steps:

- a. melt spinning a polyolefin-containing material to produce spun filaments,
- b. applying to the spun filaments a first spin finish with an active ingredient content comprising 20-100% by weight of at least one water-insoluble ester of a mono-, di-, tri- or tetrahydric alcohol with a molecular weight not exceeding 500 and a branched or straight chain fatty acid with between 12 and 30 carbon atoms,
where the water-soluble ester is present at 35-65% by weight of the finish, and said finish further comprising 35-65% of a mineral oil and 0.5 to 3% of an ethoxylated alcohol,
- c. stretching the filaments,
- d. applying to the stretched filaments a second spin finish with an active ingredient content comprising 20-100% by weight of at least one water-insoluble ester of a mono-, di-, tri- or tetrahydric alcohol with a molecular weight not exceeding 500 and a branched or straight chain fatty acid with between 12 and 30 carbon atoms,

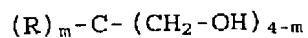
where the water-soluble ester is present at 35-65% by weight of the finish, and said finish further comprising 35-65% of a mineral oil and 0.5 to 3% of an ethoxylated alcohol,

- e. optionally, crimping the filaments,
- f. applying, during the spinning stage, the stretching stage or after crimping, an antistatic agent,
- g. drying the filaments, and
- h. cutting the filaments to obtain staple fibers.

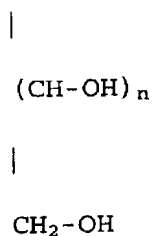
67. (withdrawn) A fiber according to claim 66, wherein the fiber is a cardable staple fiber.

68. (withdrawn) A polyolefin-containing fiber according to claim 66, consisting essentially of polypropylene, polyethylene or a copolymer thereof.

69. (withdrawn) A fiber according to claim 66, wherein the water insoluble ester is the reaction product of a polyol having the formula:



or CH_2-OH



in which R is an alkyl group having 1 to 4 carbon atoms; m is 0 to 3 and n is 0 to 4;

with a branched or straight chain fatty acid having between 12 and 30 carbon atoms.

70-71. (canceled).

72. (previously presented) A fiber according to claim 53, wherein at least one of said ester is a monoester and the reaction product of a fatty acid having 14-18 carbon atoms with a branched chain alcohol.

73. (previously presented) A fiber according to claim 53, carrying at its surface at least one water-insoluble ester comprising the reaction product of glycerol with at least one saturated or unsaturated fatty acid residue having 12-24 carbon atoms; and at least one water-insoluble ester reaction product of neopentyl glycol with at least fatty acid residue having 12-24 carbon atoms.

74. (withdrawn) A fiber according to claim 66, further comprising an antistatic agent.

75. (withdrawn) A fiber according to claim 74, wherein the antistatic agent is anionic or nonionic.

76. (withdrawn) A fiber according to claim 74, wherein the antistatic agent has the formula $R^1R^2O_3PO^-M^+$, where R^1 and R^2 are independently selected from the group consisting of C_2 - C_{30} alkyl and polyether, and M^+ is an alkali metal ion, an ammonium ion or a proton.

77. (withdrawn) A fiber according to claim 74, wherein the antistatic agent has the formula $R^1R^2O_3PO^-M^+$, where R^1 and R^2 and

R³ are independently selected from the group consisting of methyl, C₂-C₃₀ alkyl and polyether.

78. (withdrawn) A fiber according to claim 66, further comprising a friction reducing additive comprising a wax or wax mixture and/or a polydiorganosiloxane.

79. (withdrawn) A fiber according to claim 66, further comprising a mineral oil and an ethoxylated alcohol.

80. (withdrawn - previously presented) A fiber according to claim 66, having a hydrophobicity, as measured by the WRC test, corresponding to at least 5 cm for cut fibers 1 meter in length.

81. (withdrawn - previously presented) A non-woven material comprising fibers according to claim 66, having a hydrophobicity as measured by the WRC test, corresponding to at least 9 cm at a basis weight of the non-woven material of 23 g/cm².

82. (withdrawn) A method for producing a non-woven material, the method comprising providing a web of fibers according to claim 66 and bonding the web to produce the non-woven material.

83. (withdrawn) A non-woven material comprising fibers according to claim 66.

84. (withdrawn) A composite material comprising a non-woven material according to claim 83, wherein said non-woven material is:

- a. laminated to a film layer or otherwise provided with a film coating; or
bonded to or otherwise provided with a spunbonded layer of melt blown fibers.